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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 06/25/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

HOFFBERG, ROBERT JOSEPH

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 06/25/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,782

03/20/2009

Yoshinori Katada

290293US40PCT

8720

TITLE OF INVENTION: EXPANSION TANK DEVICE, PROCESS FOR FABRICATING EXPANSION TANK DEVICE, AND LIQUID COOLING RADIATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/27/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

22850 7590 06/25/2010

**OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.**  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

## **Certificate of Mailing or Transmission**

Hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,782 03/20/2009 Yoshinori Katada 290293US40PCT 8720

**TITLE OF INVENTION:** EXPANSION TANK DEVICE, PROCESS FOR FABRICATING EXPANSION TANK DEVICE, AND LIQUID COOLING RADIATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 09/27/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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HOFFBERG, ROBERT JOSEPH 2835 361-679530

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,782	03/20/2009	Yoshinori Katada	290293US40PCT	8720
22850	7590	06/25/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			HOFFBERG, ROBERT JOSEPH	
			ART UNIT	PAPER NUMBER
			2835	
DATE MAILED: 06/25/2010				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 36 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 36 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,782	KATADA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ROBERT J. HOFFBERG	2835	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/9/06.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date see attached.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|---|---|

/ROBERT J HOFFBERG/  
Examiner, Art Unit 2835

6/8/10

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Akihiro Yamazaki on Reg. No. 46,155.
3. Amend claims 1, 4, 5, 9, 10, 12-14, 22, 24, 25, 31, and 33 as follows:

Claim 1: An expansion tank device, comprising:  
a tank installation base having a cooling liquid channel; and  
an expansion tank provided on an upper surface of the installation base,  
wherein the tank installation base ~~having~~ has a communication hole for  
holding space above the upper surface thereof in communication with the cooling  
liquid channel, the expansion tank ~~having~~ has a tank main body including an  
upwardly bulging portion having an opening at a lower end thereof, and a bottom  
plate joined to a lower end of the tank main body for closing the lower-end  
opening of the bulging portion and joined to the upper surface of the tank  
installation base, the bottom plate of the expansion tank ~~being~~ is provided at a  
portion thereof corresponding to the communication hole with a through hole  
communicating with the communication hole of the tank installation base, and the

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bottom plate ~~being~~ is provided with a baffle plate formed along the entire circumference of an inner peripheral edge thereof defining the through hole and slanting upwardly toward a central portion of the through hole.

Claim 4: An expansion tank device according to claim 2 wherein the upper and lower two base forming sheets are each made of aluminum, and are brazed with a first brazing material layer formed on at least one of a lower surface of the upper base forming sheet and an upper surface of the lower base forming sheet.

Claim 5: An expansion tank device according to claim 4 wherein the bottom plate is made of aluminum, and the bottom plate is brazed to the upper base forming sheet utilizing a second brazing material layer formed on at least one of a lower surface of the bottom plate and an upper surface of the upper base forming sheet.

Claim 9: A process for fabricating ~~[[an]]~~ the expansion tank device according to claim 1, the process including ~~the steps of~~:

preparing a lower base forming metal sheet having a downwardly bulging cooling liquid channel and an upper base forming metal sheet having a communication hole formed therethrough~~[[,]]~~;

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preparing the tank main body of metal including the upwardly bulging portion having the opening at the lower end thereof and the bottom plate of metal for closing the lower-end opening of the bulging portion of the tank main body[.];

forming the through hole in the bottom plate and forming the baffle plate on the bottom plate along the entire circumference of the inner peripheral edge thereof defining the through hole, the baffle plate slanting upwardly toward the central portion of the through hole[.];

superposing the upper base forming sheet on the lower base forming sheet with the communication hole opposed to the cooling liquid channel[.];

placing the bottom plate on the upper base forming sheet with the communication hole included in the through hole and placing the tank main body on the bottom plate with the baffle plate positioned inside the upwardly bulging portion[.]; and

brazing the upper and lower base forming sheets to each other, the base plate to the upper base forming sheet and the tank main body to the bottom plate at the same time.

Claim 10: A process for fabricating an expansion tank device according to claim 9 which comprises making the upper and lower base forming sheets, the bottom plate and the tank main body from aluminum, forming a first blazing material layer on at least one of a lower surface of the upper base forming sheet

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and an upper surface of the lower base forming sheet, forming a second blazing material layer on at least one of a lower surface of the tank main body and an upper surface of the bottom plate, forming a third blazing material layer on at least one of a lower surface of the bottom plate and an upper surface of the upper base forming sheet, and brazing the upper and lower base forming sheets to each other, the base plate to the upper base forming sheet and the tank main body to the bottom plate using ~~[[these]]~~ the first, second and third brazing material layers.

Claim 12: A liquid cooling radiator according to claim 11 wherein the baffle plate has an upper end defining an opening, and wherein when the expansion tank device is rotated 90 degree to a vertical position, the cooling liquid is enclosed in the cooling liquid channel and the circulating channel in an amount permitting the cooling liquid to fill the cooling liquid channel and the circulating channel~~[[,]]~~ with ~~[[the]]~~ a liquid level of the cooling liquid inside the bulging portion of the expansion tank ~~positioned above [[an]] the opening defined by an upper end of the baffle plate, on the tank bottom plate, when the expansion tank device is in a vertical position, the amount of the cooling liquid further permitting the cooling liquid~~ and when the expansion tank device is rotated 180 degree to an upside down position, the cooling liquid is enclosed in the cooling liquid channel and the circulating channel in the amount permitting the cooling liquid to fill the cooling liquid channel and the circulating channel~~[[,]]~~ with the



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liquid level inside the bulging portion of the expansion tank ~~positioned~~ above the opening ~~defined by~~ of the baffle plate ~~upper end, when the expansion tank device is turned upside down.~~

Claim 13: A liquid cooling radiator according to claim 11 wherein the heat receiving unit comprises a heat receiving unit main body made from two highly heat-conductive sheets joined as superposed on each other and provided with a second cooling liquid channel having opposite-end openings between the two heat-conductive sheets, and a heat transfer member made from a highly heat-conductive material and provided inside the second cooling liquid channel of the unit main body, the unit main body having an outer surface providing a heat receiving portion thermally in contact with a heat generating body.

Claim 14: A liquid cooling radiator according to claim 13 wherein the heat transfer member comprises a flat tube having a plurality of borelike passageways formed in parallel and extending longitudinally of the second cooling liquid channel of the unit main body.

Claim 22: A liquid cooling radiator, ~~comprising:~~

a base plate ~~composed of~~ comprising two metal sheets joined as superposed on each other and provided with a heat receiving unit, the heat receiving unit having a cooling liquid channel, the ~~[[an]]~~ expansion tank device

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according to claim 1 and a cooling liquid circulating channel connecting ~~the~~  
~~channel of the heat receiving unit to the channel of the expansion tank device,~~  
the tank installation base of the expansion tank device comprising the two metal  
sheets.

Claim 24: A liquid cooling radiator according to claim 22 wherein the heat  
receiving unit comprises a heat receiving unit main body made from the two  
metal sheets and provided with a ~~cooling liquid~~ channel having opposite-end  
openings between the two metal sheets, and a heat transfer member made from  
a highly heat-conductive material and provided inside the ~~cooling liquid~~ channel  
of the unit main body, the unit main body having an outer surface providing a  
heat receiving portion thermally in contact with a heat generating body.

Claim 25: A liquid cooling radiator according to claim 24 wherein the heat  
transfer member comprises a flat tube having a plurality of borelike passageways  
formed in parallel and extending longitudinally of the ~~cooling liquid~~ channel of the  
unit main body.

Claim 31: A liquid cooling radiator according to claim 24 wherein the heat  
transfer member comprises a corrugated fin having crest portions and furrow  
portions which extend longitudinally of the ~~cooling liquid~~ channel of the unit main

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body, and connecting portions interconnecting the crest portions and the furrow portions respectively.

Claim 33: A notebook personal computer comprising a main body having a keyboard, and a display unit openably attached to the main body, the main body including a housing having disposed therein the liquid cooling radiator according to claim 11.

4. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: figure 11 to include “each of the two metal sheets comprises an aluminum brazing sheets” (claim 30) and a keyboard, a display unit, and a housing (claim 33). In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

5. Amend the Specification as follows:

- a. page 7, line 11, change “blazing” to - -brazing- -;
- b. page 7, line 14, change “blazing” to - -brazing- -;
- c. page 7, line 16, change “blazing” to - -brazing- -; and
- d. page 27, line 7, change “tank 8” to --tank 18--.

### REASONS FOR ALLOWANCE

6. The claims 1-33 are allowable over the prior art of record for at least the reason that the prior art fails to teach or suggest a structure as in claim 1, comprising a tank installation base having a cooling liquid channel and an expansion tank provided on an upper surface of the installation base, the tank installation base having a communication hole for holding space above the upper surface thereof in communication with the cooling liquid channel, the expansion tank having a tank main body including an upwardly bulging portion having an opening at a lower end thereof, and a bottom plate joined to a lower end of the tank main body for closing the lower-end opening of the bulging portion and joined to the upper surface of the tank installation base, the bottom plate of the expansion tank being provided at a portion thereof corresponding to the communication hole with a through hole communicating with the communication hole of the tank installation base, the bottom plate being provided with a baffle plate formed along the entire circumference of an inner peripheral edge thereof defining the through hole and slanting upwardly toward a central portion of the through hole. The aforementioned limitations in combination with all remaining limitations of the respective claims are believed to render said independent claims 1 and all claims dependent therefrom patentable over art of record. Claims 9, 11, 22, and 33 incorporate the limitations of claim 1.

7. The closest references to the present invention are believed to be as follows: US 6,947,282 and WO 03/028422 (US 6,757,169 English language equivalent claiming priority to WO/03/028422) discloses expansion tanks with an air lock, the expansion

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tank being able to be rotated without the air from entering into the liquid flow therethrough. These above listed references all lack the specific structure and arrangement in claim 1.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. None of the cited references, either taken alone or in combination is believed to render the present invention unpatentable as claimed.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2,064,141, 6,587,336, 6,661,658, 6,795,312, 6,942,019, JP 2003-7944 disclose features of the claimed invention. References US 7,417,857, 2009/0050301, and JP 2005-26498, 2007-200957 disclose features of the claimed invention, but are not prior art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Hoffberg whose telephone number is (571) 272-2761. The examiner can normally be reached on 8:30 AM - 4:30 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Gandhi can be reached on (571) 272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJH 6/8/10

/ROBERT J HOFFBERG/  
Examiner, Art Unit 2835

/Jayprakash N Gandhi/

Supervisory Patent Examiner, Art Unit 2835